

116TH CONGRESS  
2D SESSION

# H. R. 8633

To amend the Public Health Service Act to provide for the establishment of the National Center for Alternatives to Animals in Research and Testing, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

OCTOBER 20, 2020

Mr. HASTINGS (for himself, Mr. BUCHANAN, Mr. BISHOP of Georgia, and Ms. SHERRILL) introduced the following bill; which was referred to the Committee on Energy and Commerce

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## A BILL

To amend the Public Health Service Act to provide for the establishment of the National Center for Alternatives to Animals in Research and Testing, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-  
2 tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4       This Act may be cited as the “Humane Research and  
5 Testing Act of 2020”.

6 **SEC. 2. FINDINGS.**

7       The Congress finds as follows:

1                         (1) The mission of the National Institutes of  
2 Health (NIH) is to seek fundamental knowledge  
3 about the nature and behavior of living systems and  
4 the application of that knowledge to enhance health,  
5 lengthen life, and reduce illness and disability.

6                         (2) Much of NIH's research is carried out on  
7 animals. However, the precise number of animals  
8 used in research in the United States is unknown.  
9 Estimates range between 17 million and 100 million  
10 animals used annually. Such imprecise numbers  
11 make it impossible to effectively track and reduce  
12 the numbers of animals used, as mandated by the  
13 NIH policies to ensure the smallest possible number  
14 of animals are used.

15                         (3) There is widespread agreement among sci-  
16 entists and regulatory agencies that animal models  
17 are poor predictors of the human response, with over  
18 90 percent of new candidate drugs never making it  
19 to market.

20                         (4) More than 30 percent of promising medica-  
21 tions have failed in human clinical trials because  
22 they are found to be toxic despite promising pre-clin-  
23 ical studies in animal models. An additional 65 per-  
24 cent of candidate drugs that pass animal trials fail  
25 due to lack of efficacy.

1                         (5) Despite the ever-increasing growth in animal  
2                         procedures, there is no corresponding increase  
3                         in the number of human medicines making it to the  
4                         clinic.

5                         (6) Dramatically rising costs and extremely  
6                         high failure rates in drug development have led  
7                         many to re-evaluate the value of animal studies.

8                         (7) Effective alternatives to animals are available and growing. Cutting-edge technology has forged new frontiers in biology and medicine that have produced human-relevant models, including organoid cell cultures, organs-on-chips, genomics, induced pluripotent adult stem cells, 3D modeling with human cells, high throughput technology, molecular imaging, computer models, in silico trials, digital imaging, artificial intelligence, and other innovative methods—all of which have launched a technological revolution in biomedical research.

19                         (8) Despite these cutting-edge, human-relevant methods, a preponderance of NIH research is carried out on animals. A 2019 news release from NIH indicates that 70 percent of NIH grant applications relate to studies using mice.

24                         (9) The American public has expressed concern  
25                         about subjecting animals to the pain of experimen-

1 tation. This concern grows as alternatives to re-  
2 search on animals become available.

3 (10) Under the system of oversight established  
4 by the National Institutes of Health Revitalization  
5 Act of 1993 (Public Law 103–43), NIH is supposed  
6 to outline a plan for reducing the use of animals in  
7 research. Section 404C(a)(1) of the Public Health  
8 Service Act (42 U.S.C. 283e(a)(1)), as added by sec-  
9 tion 205 of the National Institutes of Health Revi-  
10 talization Act of 1993, calls for NIH to “conduct or  
11 support research into . . . methods of biomedical re-  
12 search and experimentation that do not require the  
13 use of animals and methods of such research and ex-  
14 perimentation that reduce the number of animals  
15 used in such research”.

16 (11) A dedicated center that provides resources,  
17 funding, and training to encourage researchers to  
18 utilize humane, cost-effective, and scientifically suit-  
19 able non-animal methods is needed to fulfill the in-  
20 tent of the National Institutes of Health Revitaliza-  
21 tion Act of 1993 (Public Law 103–43).

1   **SEC. 3. NATIONAL CENTER FOR ALTERNATIVES TO ANI-**

2                   **MALS IN RESEARCH AND TESTING.**

3               (a) ADDITION TO LIST OF INSTITUTES AND CEN-

4   TERS.—Section 401 of the Public Health Service Act (42

5   U.S.C. 281) is amended—

6               (1) by redesignating paragraph (25) as para-

7       graph (26); and

8               (2) by inserting after paragraph (24) the fol-

9       lowing new paragraph:

10               “(25) National Center for Alternatives to Ani-

11       mals in Research and Testing.”.

12               (b) CONFORMING CHANGE TO NUMBER OF INSTI-

13       TUTES AND CENTERS.—Section 401(d)(1) of the Public

14       Health Service Act (42 U.S.C. 281(d)(1)) is amended by

15       striking “27” and inserting “28”.

16               (c) ESTABLISHMENT; DUTIES.—Part E of title IV of

17       the Public Health Service Act (42 U.S.C. 287 et seq.) is

18       amended by inserting after subpart 5 of such part E (42

19       U.S.C. 287c–21) the following new subpart:

20               **“Subpart 6—National Center for Alternatives to**

21                   **Animals in Research and Testing**

22               **“SEC. 485E. ESTABLISHMENT; DUTIES.**

23               “(a) ESTABLISHMENT.—Not later than one year

24       after the date of enactment of the Humane Research and

25       Testing Act of 2020 the Secretary shall establish a Na-

26       tional Center for Alternatives to Animals in Research and

1 Testing (in this subpart referred to as the ‘National Cen-  
2 ter’) within the National Institutes of Health.

3 “(b) PURPOSES.—The sole purposes of the National  
4 Center shall be—

5 “(1) developing, promoting, and funding alter-  
6 natives to animal research and testing; and

7 “(2) developing a plan for reducing the number  
8 of animals used in federally funded research and  
9 testing.

10 “(c) DUTIES.—The Director of the National Center  
11 shall—

12 “(1) provide assistance (including funding) to  
13 federally funded researchers to incentivize research  
14 and testing without the use of animals, based on ad-  
15 vanced cell cultures or technology such as 3D  
16 organoids, microphysiological systems, induced  
17 pluripotent adult stem cell models, in silico mod-  
18 eling, advanced imaging systems, artificial intel-  
19 ligence, and other innovative methods;

20 “(2) train and inform scientists about these  
21 available methods of research and testing without  
22 the use of animals;

23 “(3) establish collaborations among research  
24 scientists to assist those working in institutions  
25 where research and testing scientists may lack re-

sources (such as bioengineering and advanced bio-imaging equipment) to carry out new and emerging high-tech methods of research and testing without the use of animals; and

5               “(4) tally and make publicly available informa-  
6               tion on the numbers of animals used in federally  
7               funded research and testing in order to implement  
8               adequate steps to measure the reduction of animals  
9               so used.”.

10 SEC. 4. REPORTING BY FEDERALLY FUNDED RESEARCH  
11 ENTITIES ON NUMBERS OF ANIMALS USED IN  
12 RESEARCH AND TESTING.

13       (a) IN GENERAL.—Each covered reporting entity  
14 shall do the following:

(A) the total number of animals used in federally funded research and testing at any facilities of the covered reporting entity, disaggregated by species; and

(B) the total number of such animals that were bred or acquired for research or testing purposes, disaggregated by species.

1                         (2) Every 2 years thereafter, update the latest  
2                         report of the entity under this section and make  
3                         publicly available such updated report to measure  
4                         the progress of the covered reporting entity in reduc-  
5                         ing the number of animals used in federally funded  
6                         research and testing.

7                         (3) On an annual basis, develop and submit to  
8                         the National Center for Alternatives to Animals in  
9                         Research and Testing and make publicly available a  
10                         plan for reducing the numbers described in subpara-  
11                         graphs (A) and (B) of paragraph (1).

12                         (b) STANDARDIZED PROCESS.—The Director of the  
13                         National Center for Alternatives to Animals in Research  
14                         and Testing shall establish a standardized process for sub-  
15                         mitting and updating reports and plans under subsection  
16                         (a), including for making such reports and plans publicly  
17                         available.

18                         (c) DEFINITION.—In this section:

19                         (1) The term “animal”—  
20                                 (A) means any vertebrate; and  
21                                 (B) includes all warm-blooded and cold-  
22                                 blooded species.

23                         (2) The term “covered reporting entity”  
24                         means—

25                                 (A) any entity that—

- 1                             (i) receives Federal funds for research  
2                             or testing; and  
3                             (ii) uses animals in research and test-  
4                             ing; and  
5                             (B) any Federal department or agency  
6                             that uses animals in research or testing.

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